After elimination of the limo phosphate, tho slag present* itself as an, of course, hypothetical silicate slag, to which 0110 can ascrihe the property of holding In solution the, corresponding amount of limo phosphate. One can them further estimate for each example, from practice, how much silicate slag per unit SiOa was formed, how much alkaline earth was necessary for its formation, and how much silicic acid was required to form the hypothetical silicate slag, which wan capable of dissolving the limo phosphate, duo to I unit phosphoric acid. In order to ohtain butter analytical material for these calculations also, such analyses aro takon in which only the three principal substances SiO-j, I'-jOf, and Ko are given.

A comparison of the results given shows that tho slags may very well bo divided into two classes, of which tho first is formed by the case of dec.arburisalion to about 2 to 3 per cent, tho second the ease of complete de.carhuri-sation.

Table Q. " Docarburisation of the metal to about *J to 8 per cent" (p. 178), unfortunately only contains analyses for highly phosphoric materials by the Bertrand-Thie.l process, since others are not at disposal. For low phosphorus materials, the material IB inadequate on the ground that the ending of a process with Buch high carbon con it nits practically never takes place; in order, however, nevertheless to have some approximate data, slags are also taken which omir in the usual pig iron-ore process, notwithstanding that the, high iron content of these slags indicates that their oxygen content was not as yet exhausted, owing to which they could not bo regarded as intrinsically good final slags.

Table B. " Final slags on complete doearlwrisation of the? metal." (p. 180), contains, on the contrary, sla^s from all parts of the world, and from furnaeoH of the nun-it widely different construction.

One sees at once from both tables that limo phosphate appears easily soluble in Hits hypothetical Htlicatn nlag, inasmuch as one unit of weight of raOf, in tho form of limo phosphate can be contained in an amount of hypothetical Hiliwtu Hlag, in the formation of which only O'OB to 07 unit** of w«i"ht